

國立臺北科技大學

九十九學年第二學期電機系博士班資格考試

資料庫 試題

第一頁 共一頁

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注意事項：

1. 本試題共【10】題，配分共 100 分。
2. 請按順序標明題號作答，不必抄題。
3. 全部答案均須答在試卷答案欄內，否則不予計分。
4. 考試時間：二小時。

1. [10 points] Give an example of a relation in 3NF but not in BCNF.
2. [10 points] What is weak entity type? How to identify a weak entity?
3. [10 points] Why does SQL allow duplicate tuples in a table? How do you prevent duplicate tuples in a table?
4. [10 points] Explain timestamp ordering protocol in concurrency control.
5. [10 points] What is the two-phase locking protocol?
6. [10 points] Explain the problems of deadlock and starvation in concurrency control.
7. [10 points] What is a serial schedule? What is a serializable schedule?
8. [10 points] Discuss the techniques for allocating file blocks on disk.
9. [10 points] Discuss the various reasons that lead to the occurrence of null values in relations.
10. [10 points] List two reasons why we may choose to define a view.